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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,288	07/09/2003	Paul Mertens	00-524-B	6905
20306	7590	10/04/2004	EXAMINER	
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP			STINSON, FRANKIE L	
300 S. WACKER DRIVE			ART UNIT	
32ND FLOOR			PAPER NUMBER	
CHICAGO, IL 60606			1746	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,288

Applicant(s)

MERTENS ET AL.

Examiner

FRANKIE L. STINSON

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-37 is/are pending in the application.
- 4a) Of the above claim(s) 27-31 and 33-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-24 and 32 is/are rejected.
- 7) ☒ Claim(s) 25 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/8/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. Claims 27-31 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on September 13, 2004. Please note that claim 27 has not been deemed not readable on the elected species of fig. 1 and therefore claims 29-31 stand withdrawn in that they depend from the same.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 17, 19-22, 24 and 32 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by either Onoda et al. Kimura et al.

Re claims 17 and 22. note that Onoda and Kimura each disclose an apparatus for liquid treating and drying at least one flat semiconductor substrate, said apparatus comprising in combination: a tank (11 in Onoda and 562 in Kimura), said tank comprising a wall with at least one hole (as at 15 in Onoda and 562d in Kimura) and comprising at least one opening in a top section of said tank, said opening allowing passage of said substrate in a direction parallel to the plane of said substrate, said tank on the outside further comprising a gutter and a drain (12/11 in Onoda and 562a/562b in Kimura), the gutter on at least a portion of the tank, the drain connected to said gutter;

means (563a in Onoda and 100 in Kimura) for moving said substrate into said tank; and means for moving said substrate out of said tank through said opening in an essentially vertical direction. Re claims 19 and 24, Onoda and Kimura disclose the opening size as claimed. Re claim 20, Onoda and Kimura disclose the moving means comprising a gripper. Re claims 21 and 32, Onoda and Kimura disclose the gutter surrounding the tank.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Onoda et al or Kimura et al. in view of Kimikawa et al. (U. S. Pat. No. 6,119,367).

Claims 18 and 23 define over the applied prior art only in the recitation of the gaseous flow being parallel to the substrate surface and being directed to the intersection between the substrate and liquid in the tank and further being heated as required by claim 23. Kamikawa is cited disclose the heated (90) flow being parallel to the substrate surface (see fig. 2). It therefore would have been obvious to one having ordinary skill in the art to modify the device of either Onoda or Kimura, to have the heated parallel flow as taught by Kamikawa, for the purpose of removing any liquid adhering to the substrate.

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6. Claims 25 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In Yokomizo, Japan'835, Fishkin et al., Japan'121, Tanaka et al., Nakashima et al., Japan'273, Bergman, Allen et al., Japan'120, Zuck et al., Oravec, Jung, Fung et al. And Kamikawa et al. '104, note the gas supplying means.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (703) 308-0661. The examiner can normally be reached on M-F from 5:30 am to 2:30 and some Saturdays from approximately 7:30 am to 1:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached on (571) 272-1700. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

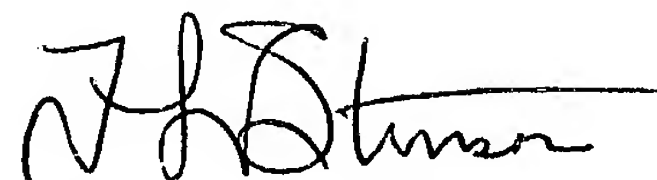
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fls



FRANKIE L. STINSON
Primary Examiner
GROUP ART UNIT 1746